# **Rates and Money Market (10 questions)**

1. Which of the following is NOT the features of fixed term interbank lending?

- a. Transaction can be terminated any day prior to maturity date without penalty.
- b. Interest rate is agreed by both parties on trade date.
- c. It is not guaranteed by the Deposit Protection Agency (DPA).
- d. All of the above

### Answer A

2. A bond with face value of THB 100 and an annual coupon of 2.50% per annum has a clean price of THB 102.50 and 180 days of accrued interest. Calculate the accrued interest and dirty price.

- a. Accrued interest is THB 1.2329 and dirty price is THB 101.2671
- b. Accrued interest is THB 1.2329 and dirty price is THB 103.7329
- c. Accrued interest is THB 1.2500 and dirty price is THB 101.2500
- d. Accrued interest is THB 1.2500 and dirty price is THB 103.7500

#### **Answer B**

- 3. Which of the following investments provides the highest effective rate of return?
  - a. THB 1 million for 60 days at a yield of 1.500% per annum
  - b. THB 1 million for 124 days at a yield of 1.505% per annum
  - c. THB 1 million for 187 days at a yield of 1.510% per annum
  - d. THB 1 million for 273 days at a yield of 1.515% per annum

#### Answer D

4. Which of the following investments is most attractive in term of percentage total return of investment?

- a. 1-year BOT Bilateral Repo overnight at 1.50%. The rate stays the same through entire duration.
- b. 1-year government bond at par of THB 100 with annual coupon of 1.505% and hold to maturity.
- c. 10-year government bond at par of THB 100 with annual coupon of 2.01%, hold for 1 year and sell at yield of 2.11% (assume modified duration at selling date is 8.19).
- d. 1-year Treasury bill at price of 98.52 Baht and hold to maturity.

5. A 120-day Certificate of Deposit (CD) is issued with a face value of USD 1 million and a coupon of 0.55% per annum. A dealer buys this CD in the secondary market, when it has only 60 days left to maturity and is quoted as 0.50 / 0.56%. What is the price he has to pay for the CD?

- a. USD 999,001.83
- b. USD 999,015.48
- c. USD 1,000,985.49
- d. USD 1,000,999.17

#### Answer D

6. Based on the following zero curve, the 1-year forward zero-coupon rate in 1 year's time is closest to:

	<u>Tenor</u>	THB Zero curve (30/360)
	1 yr	1.46%
	2 yr	1.56%
	3 yr	1.57%
a.	1.48%	
b.	1.51%	
C.	1.66%	
d.	1.73%	

#### Answer C

7. If you think the forward rate of 1-year 1 year forward is too low and you expect it to rise further, which of the following is the best strategy to trade that specific part of the curve?

- a. Buy 2-year zero coupon bond, Sell 1-year zero coupon bond
- b. Sell 2-year zero coupon bond, Sell 1-year zero coupon bond
- c. Sell 2-year zero coupon bond, Buy 1-year zero coupon bond
- d. Buy 2-year zero coupon bond

_	Spot US	SD/THB	34.62		
					USD
	Tenor	Days	Swap	Libor	Deposit
	1M	31	2.50	0.52	0.54
	3M	92	4.50	0.83	0.98
	6M	182	6.50	1.23	1.38
	12M	365	9.50	1.53	1.51

8. Given the following information, the 6M THBFIX is closest to:

Remark: THBFIX =	$\left\{ \left[ \left( \frac{Spot Rate + Forward Points}{Spot Rate} \right) \times \left( 1 + \frac{USD Rate \times \# days}{360} \right) \right] - 1 \right\} \times \frac{365}{\# days} \times 100$
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a. 1.6088%

b. 1.6260%

c. 1.7591%

d. 1.7783%

#### Answer B

9. Today is Thursday 30 June 2016, Bank A borrows USD10 million from Bank B on Tom-Next (T/N) basis. Which of the following would be the day range for interest calculation, given that Friday 1 July 2016 is Thailand's half-year bank holiday and Monday 4 July 2016 is US holiday?

a. 1 July 2016 to 4 July 2016

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- b. 1 July 2016 to 5 July 2016
- c. 4 July 2016 to 5 July 2016
- d. 5 July 2016 to 6 July 2016

**Answer B** 

10. Bank ABC borrows THB 1 billion from Bank XYZ via repo market. Given GMRA agreement: Haircut = 5%, Threshold = THB 10 million In the case of an upward interest rate trend, the mark-to-market price of the bonds that Bank ABC transferred to Bank XYZ are reduced from THB 1,050 million to THB 950 million. Which of the following should Bank ABC and Bank XYZ do?

- I. Bank ABC to deliver some more cash margin to Bank XYZ
- II. Bank XYZ to deliver some more cash margin to Bank ABC
- III. Bank ABC to deliver some more bonds to Bank XYZ
- IV. Bank XYZ to deliver some more bonds to Bank ABC
- a. I only
- b. II only
- c. I or III
- d. II or IV

## ALM and Risk management (4 questions)

- 1. Which of the following limits are related to interest rate risk?
  - I. Value at Risk (VaR)
  - II. Liquidity Coverage Ratio (LCR)
  - III. Net Stable Funding Ratio (NSFR)
  - IV. Factor Sensitivity (FS) or PV01
  - a. I and II
  - b. I and III
  - c. I and IV
  - d. I, II, III and IV

#### Answer C

- 2. Which of the following is NOT the function of the Funds Transfer Pricing (FTP) Unit?
  - a. To reflect the performance of business units
  - b. To reflect the value and cost of funding
  - c. To reflect credit risk of clients
  - d. To reflect interest rate and liquidity risks

#### Answer C

3. Given the following PV01 exposure of a bank, which of the following statements is CORRECT?

			PV01 Exposure							
_		1m	3m	6m	1y	2у	Зу	5y	>5y	Total
	Assets	-50			-100	-50	-50	-30	-20	-300
	Liabilities	+100		+100	+100					+300
									Net PV01	0

- I. This bank has an interest rate gap in its balance sheet.
- II. In an uptrend interest rate cycle, the bank will get the benefit from a large position in long-term assets.
- III. In a downtrend interest rate cycle, the bank will get the benefit from a large position in long-term assets.
- IV. This bank has no interest rate risk since net PV01 = 0
- a. I and II
- b. I and III
- c. I and IV
- d. IV only

#### **Answer B**

- 4. Which of the following statements is CORRECT about "BASEL III"?
  - I. Basel III promotes a more resilient banking system by focusing on four vital banking parameters, namely: capital, leverage, funding, and liquidity
  - II. The requirement for total capital ratio for Thai bank is 8.5%
  - III. The Liquidity Coverage Ratio (LCR) requires banks to hold a buffer of high-quality liquid assets sufficient to deal with the cash outflows encountered in an acute short-term stress scenario as specified by supervisors.
  - a. I only
  - b. II only
  - c. III only
  - d. I, II and III

Answer D

# FX and Derivatives (10 questions)

1. Which of the following is the correct interpretation of FX quotation "USDJPY 110.95/00"?

- a. USDJPY bid 111.00 ask 110.95 : Buy USD sell JPY at 110.95 Sell USD buy JPY at 111.00
- b. USDJPY bid 110.95 ask 111.00 : Buy USD sell JPY at 110.95 Sell USD buy JPY at 111.00
- c. USDJPY bid 110.95 ask 111.00 : Buy USD sell JPY at 111.00 Sell USD buy JPY at 110.95
- d. USDJPY bid 111.00 ask 110.95 : Buy USD sell JPY at 111.00 Sell USD buy JPY at 110.95

### Answer C

2. Which of the following currencies is NOT a direct quotation currency?

- a. SGD
- b. HKD
- c. NZD
- d. CAD

# Answer C

3. Which of the following is NOT correct?

- a. The currency code written on the left is the base currency; the unit number of base currency is always 1.
- b. When the bid/offer spread of an exchange rate is zero, this is known as "a choice price".
- c. A yard of a currency is a trillion units of that currency.
- d. If a party calling for a price says "My Risk", he is acknowledging that the price may change before he has accepted it.

	USD/THB	USD/JPY		
Spot	35.00/10	103.67/72		
	FX Swap			
O/N	0.06/0.11	-0.20/-0.15		
T/N	0.04/0.09	-0.15/-0.10		
1wk	0.50/0.60	-1.65/-1.25		
		-16.02/-		
1m	1.60/2.10	14.90		
2m	2.70/3.20	-27.5/-25.5		
		-40.00/-		
3m	3.70/4.20	37.99		

4. If you want to buy JPY/THB value Tom, at what rate will you execute?

- a. 0.337704
- b. 0.338397
- c. 0.338412
- d. 0.338567

#### Answer D

5. What is the 6-month EUR/THB swap point for the offer side, based on the following prices?

<u>Spot</u>	EUR/USD	1.1130 / 1.1133
	USD/THB	34.92 / 34.94

<u>FX Swap</u>	6-month EUR/USD	93.0 / 94.0
	6-month USD/THB6.25,	/ 6.50

- a. 0.3949
- b. 0.3979
- c. 0.3984
- d. 0.4014

Answer D

6. A Japanese company located in Thailand needs a 49-day funding in Thai Baht. It is considering to borrow from either local banks or its parent company in Japan. The decision is between THB loan with interest rate 3.17% p.a., or JPY loan of 0.03% p.a. Given the information below, which of the following is correct?

Day count: USD ACT/360, THB ACT/365, JPY ACT/360

<u>Spot</u>	USD/THB	34.93/	95
	USD/JPY		102.48/50
<u>FX Swap</u>	1-month USD/TH	B (30D)	2.5/2.9
	2-month USD/TH	B (60D)	3.7/4.2
	1-month USD/JPY	(30D)	-25.50/-25.10
	2-month USD/JPY	(60D)	-36.80/-36.40

- a. JPY loan is cheaper since the interest rate is 0.03% comparing with THB loan at 3.17%
- b. JPY loan is cheaper since total cost is 3.13% comparing with total cost of THB loan at 3.17%
- c. THB loan is cheaper since total cost is 3.17% comparing with total cost of JPY loan at 3.21%
- d. THB loan is cheaper since total cost is 3.17% comparing with total cost of JPY loan at 3.18%

7. Company A borrows money in USD for 3 years at 6M LIBOR + 30 bps. At what level could Company A swap the floating interest rate into USD fixed rate (Semi-annual, ACT/360)?

THB IRS	Bid	Offer
1y	1.48	1.52
2y	1.52	1.56
Зу	1.57	1.61
USD/THB Basis	Bid	Offer
1y	-5	-1
2у	-10	-6
Зу	-16	-12
USD IRS (against 3M		
LIBOR)	Bid	Offer
1y	0.9	0.92
2у	0.97	0.99
Зу	1.02	1.04
<sup>3y</sup> USD IRS (against 6M	1.02	
,	1.02 Bid	
USD IRS (against 6M		1.04
USD IRS (against 6M LIBOR)	Bid	1.04 Offer

a. 1.31%

b. 1.34%

c. 1.59%

d. 1.61%

### Answer D

8. Bank A buys a 1.58% THB 1x4 FRA contract against 3M BIBOR on a notional principal of THB 1 billion. The term of the underlying contract is 92 days. At the fixing date, the reference 3M BIBOR is 1.32%. Bank A has the obligation to:

- a. pay THB 652,742.94, on the next 2 business days after the fixing date
- b. pay THB 653,169.29, on the next 2 business days after the fixing date
- c. pay THB 655,342.47, on the fixing date
- d. pay THB 655,342.47, on the maturity date (3 months after the fixing date)

#### Answer B

9. A trader sells 3-month USD call / THB put option at the strike of 35.50 for THB 10,000 and sells 3-month USD put / THB call option at the strike of 34.50 for THB 8,000. What is the name of this trading strategy and its maximum payoff?

- a. Collar, THB 18,000
- b. Collar, unlimited
- c. Strangle, THB 18,000
- d. Strangle, unlimited

#### Answer C

10. Which of the following statements is correct?

- I. An option gives the buyer the obligation to buy or to sell the underlying asset by a certain date for a certain price.
- II. A European option can be exercised at any time up to the expiration date while an American option can be exercised only on the expiration date.
- III. A 1-month CNH put / THB call option with the strike of 5.2400 will be ITM (in-the-money) when the spot rate is 5.2531 and 1-month swap is -36.55.
- IV. A straddle is a strategy where the buyer buys a call and a put option at the same strike price. For the buyer to make a profit, the spot price should be moving as little as possible since the buyer of this strategy is shorting gamma.
- a. I and II
- b. III
- c. III and IV
- d. None of the above

Answer D